

5 CLAIMS:

1. A method for controlling a moisture level of a material to be used in a cleanroom, the method comprising:
placing the material in a wetting chamber;
applying a cleaning solution to the material; and
10 controlling a saturation level of the cleaning solution in the material.
2. The method of claim 1 wherein controlling the saturation level comprises controlling the applying of cleaning solution to the material as a function
15 of electrical conductivity of the material.
3. The method of claim 1 wherein controlling the saturation level comprises controlling the applying of cleaning solution to the material as a function of mass of the material.
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4. The method of claim 1 wherein controlling the saturation level comprises controlling the applying of cleaning solution to the material as a function of time.
- 25 5. The method of claim 1 wherein controlling saturation level comprises applying pressure to the material to reduce the saturation level of the material to a target saturation level.
6. A device for moistening a material used in a cleanroom to a target
30 saturation level, the device comprising:
a chamber;
a rack positioned in the chamber for holding the material;

5 a liquid supply of a liquid;
 an applicator in the chamber for applying the liquid to the material;
 a delivery system for delivering the liquid from the supply to the
 applicator; and
 a control system for controlling the amount of liquid applied to the
10 material based on a parameter related to the target saturation
 level of the material.

7. The device of claim 6 wherein the control system controls the
amount of liquid dispensed to the material as a function of electrical conductivity of
15 the material.

8. The device of claim 6 wherein the control system controls the
amount of liquid dispensed to the material as a function in mass of the material.

20 9. The device of claim 6 wherein the control system controls the
amount of liquid dispensed to the material as a function of a time duration.

10. The device of claim 6 wherein the rack is centrally positioned within
the chamber.

25 11. The device of claim 6 wherein the applicator includes a pump for
pumping the liquid under pressure and a nozzle for applying the liquid.

12. The device of claim 6 wherein the control system includes a pump
30 control for controlling the amount of liquid applied to the material.

5 13. The device of claim 6 wherein the control system includes a user interface for providing a user input signal representing the target saturation level.

14. The device of claim 6 wherein the control system includes a feedback sensor for providing a feedback signal representing the parameter.

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15. The device of claim 6 wherein the control system includes a shut off sensor for providing a signal to the control system to disengage from the application of liquid to the material when the chamber is in an open position.

15 16. The device of claim 6 wherein the chamber has a drain for draining excess liquid.

17. The device of claim 16 wherein the drain leads to a liquid collection system.

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18. A device for moistening a material used in a cleanroom, the device comprising:

a rack for holding the material;

an applicator spaced from and directed toward the rack for applying

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a liquid to the material; and

a control system for controlling application of liquid to the material

based on a desired saturation level of the material.

19. The device of claim 18 wherein the applicator is movable with
30 respect to the rack.

5 20. The device of claim 18 wherein the applicator comprises a plurality of nozzles.

 21. The device of claim 18 wherein the plurality of nozzles has a first set of nozzles positioned above the rack and a second set of nozzles positioned below
10 the rack.

 22. The device of claim 18 wherein the control system controls the amount of liquid dispensed to the material as a function of conductivity of the material.

15 23. The device of claim 18 wherein the control system controls the amount of liquid dispensed to the material as a function of mass of the material.

 24. The device of claim 18 wherein the control system controls the
20 amount of liquid dispensed to the material as a function of time.

 25. The device of claim 18 wherein the machine has a drainage and collection system.

25 26. A device for moistening a material used in a cleanroom to a desired saturation level, the device comprising:

 a chamber;
 a rack positioned in the chamber for holding the material;
 an applicator for applying liquid to the material;
30 a user interface for providing a user input signal;
 a feedback system for providing a feedback signal which is a
 function of the saturation level of the material; and

5 a control system for controlling the amount of liquid applied to the material as a function of the user input signal and the feedback signal.

27. The device of claim 26 further comprising a pressure applicator
10 for applying pressure to the material to reduce liquid content of the material.